

10724731

10/458135

Page 1

Connecting via Winsock to STN

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * *

| | |
|----------------|---|
| NEWS 1 | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS 2 | "Ask CAS" for self-help around the clock |
| NEWS 3 May 12 | EXTEND option available in structure searching |
| NEWS 4 May 12 | Polymer links for the POLYLINK command completed in REGISTRY |
| NEWS 5 May 27 | New UPM (Update Code Maximum) field for more efficient patent SDIs in Caplus |
| NEWS 6 May 27 | Caplus super roles and document types searchable in REGISTRY |
| NEWS 7 Jun 28 | Additional enzyme-catalyzed reactions added to CASREACT |
| NEWS 8 Jun 28 | ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R) |
| NEWS 9 Jul 12 | BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS |
| NEWS 10 Jul 30 | BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting |
| NEWS 11 AUG 02 | IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields |
| NEWS 12 AUG 02 | Caplus and CA patent records enhanced with European and Japan Patent Office Classifications |
| NEWS 13 AUG 02 | STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting |
| NEWS 14 AUG 02 | The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available |
| NEWS 15 AUG 04 | Pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! will change September 1, 2004 |
| NEWS 16 AUG 27 | BIOCOMMERCE: Changes and enhancements to content coverage |
| NEWS 17 AUG 27 | BIOTECHABS/BIOTECHDS: Two new display fields added for legal status data from INPADOC |
| NEWS 18 SEP 01 | INPADOC: New family current-awareness alert (SDI) available |
| NEWS 19 SEP 01 | New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! |
| NEWS 20 SEP 01 | New display format, HITSTR, available in WPIDS/WPINDEX/WPIX |
| NEWS 21 SEP 14 | STN Patent Forum to be held October 13, 2004, in Iselin, NJ |
| NEWS EXPRESS | JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004 |
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* *

FILE 'HOME' ENTERED AT 12:38:39 ON 16 SEP 2004

| | | |
|----------------------|------------|---------|
| => file reg | SINCE FILE | TOTAL |
| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 12:39:09 ON 16 SEP 2004
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 SEP 2004 HIGHEST RN 744786-72-9
 DICTIONARY FILE UPDATES: 14 SEP 2004 HIGHEST RN 744786-72-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

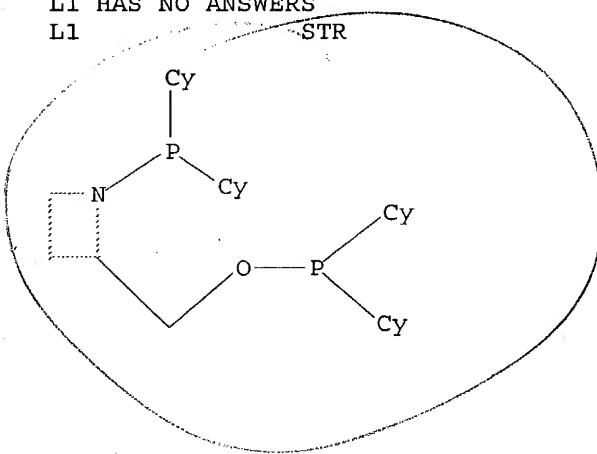
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>
 Uploading C:\Program Files\Stnexp\Queries\10724731C.str

L1 STRUCTURE uploaded

=> d L1
 L1 HAS NO ANSWERS
 L1



Structure attributes must be viewed using STN Express query preparation.

```
=> s L1
SAMPLE SEARCH INITIATED 12:39:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      0 TO ITERATE

100.0% PROCESSED      0 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01
```

| | | | |
|------------------------|--------|--------------|---|
| FULL FILE PROJECTIONS: | ONLINE | **COMPLETE** | |
| | BATCH | **COMPLETE** | |
| PROJECTED ITERATIONS: | | 0 TO | 0 |
| PROJECTED ANSWERS: | | 0 TO | 0 |

L2 0 SEA SSS SAM L1

| | | | |
|----------------------|--|------------------|---------------|
| => file caplus | | | |
| COST IN U.S. DOLLARS | | SINCE FILE ENTRY | TOTAL SESSION |
| FULL ESTIMATED COST | | 0.42 | 0.63 |

FILE 'CAPLUS' ENTERED AT 12:39:57 ON 16 SEP 2004
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FILE COVERS 1907 - 16 Sep 2004 VOL 141 ISS 12
 FILE LAST UPDATED: 15 Sep 2004 (20040915/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s L1
REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.
```

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SAMPLE SEARCH INITIATED 12:40:03 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      0 TO ITERATE

100.0% PROCESSED      0 ITERATIONS          0 ANSWERS
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10/458135

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SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L3 0 SEA SSS SAM L1

L4 0 L3

=> set extend on
SET COMMAND COMPLETED

=> s L1 full
REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 12:41:34 FILE 'REGISTRY'

L5 6 SEA SSS FUL L1 EXTEND

CANDIDATE STRUCTURE SEARCH COMPLETED - 6 TO ITERATE

100.0% PROCESSED 6 ITERATIONS 5 ANSWERS
SEARCH TIME: 00.00.01

L6 5 SEA SSS FUL L1

L7 3 L6

=> d 1-3 ibib abs hitstr

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:714165 CAPLUS
DOCUMENT NUMBER: 137:232770
TITLE: Preparation of transition metal complexes containing chiral phosphine ligands for use as asymmetric hydrogenation catalysts
INVENTOR(S): Hassila, Heikki; Higashii, Takayuki
PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|-------|-------|-----------------|-------|
| ----- | ----- | ----- | ----- | ----- |

| | | | | |
|--|----|----------|----------------|------------|
| EP 1241174 | A1 | 20020918 | EP 2002-5894 | 20020314 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2002338589 | A2 | 20021127 | JP 2002-64944 | 20020311 |
| US 2003191324 | A1 | 20031009 | US 2002-97009 | 20020314 |
| <i>US 6762306</i> | B2 | 20040713 | | |
| US 2004110965 | A1 | 20040610 | US 2003-724731 | 20031202 |
| | | | JP 2001-71784 | A 20010314 |

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 137:232770

AB Chiral phosphines [e.g., (S)-N,O-bis(diphenylphosphino)- α , α -dimethyl-2-azetidine methanol, (I)] and their corresponding transition metal catalytic complexes were prepared. For example, (S)- α , α -dimethyl-2-azetidine methanol was reacted with chlorodiphenylphosphine to give \approx 81 I, which is further reacted with [Rh(COD)2]OTf to give the corresponding rhodium cyclooctadiene complex. In the presence of the rhodium complex, α -acetylamo-4-chlorostyrene is hydrogenated to give \approx 90 N-acetyl-(4-chloro)- α -phenethylamine.

IT 459426-40-5P 459426-43-8P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

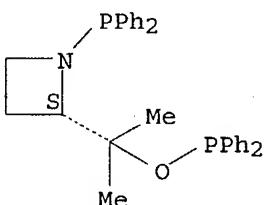
(preparation of transition metal complexes containing chiral phosphine ligands

for use as asym. hydrogenation catalysts)

RN 459426-40-5 CAPLUS

CN Phosphinous acid, diphenyl-, 1-[(2S)-1-(diphenylphosphino)-2-azetidinyl]-1-methylethyl ester (9CI) (CA INDEX NAME)

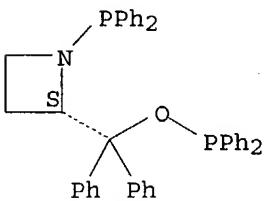
Absolute stereochemistry.



RN 459426-43-8 CAPLUS

CN Phosphinous acid, diphenyl-, [(2S)-1-(diphenylphosphino)-2-azetidinyl]diphenylmethyl ester (9CI) (CA INDEX NAME)

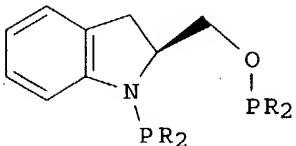
Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2000:820360 CAPLUS
 DOCUMENT NUMBER: 134:131628

TITLE: Free and Cr(CO)₃-Complexed Aminophosphine Phosphinite Ligands for Highly Enantioselective Hydrogenation of α -Functionalized Ketones
 AUTHOR(S): Pasquier, Corinne; Naili, Said; Mortreux, Andre; Agbossou, Francine; Pelinski, Lydie; Brocard, Jacques; Eilers, Juergen; Reiners, Iris; Peper, Viola; Martens, Juergen
 CORPORATE SOURCE: Laboratoire de Catalyse de Lille Groupe de Chimie Organique Appliquee, Ecole Nationale Supérieure de Chimie de Lille, Villeneuve d'Ascq, 59652, Fr.
 SOURCE: Organometallics (2000), 19(26), 5723-5732
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 134:131628
 GI



I

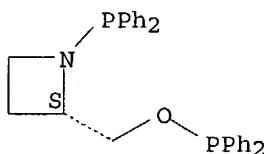
AB The synthesis and characterization of a new series of aryl- and cycloalkyl-substituted aminophosphine phosphinites, e.g. I (R = cyclopentyl), obtained from the reaction of the three precursors (S)-2-hydroxymethylazetidine, (S)-3-hydroxymethyl-1,2,3,4-tetrahydroisoquinoline, and (S)-2-hydroxymethylindoline and chlorophosphines is described. The aromatic ring in (S)-2-hydroxymethylindoline has allowed the synthesis and isolation of tricarbonyl chromium complexed amino alcs., which were similarly converted into the corresponding aminophosphine phosphinites, presenting a stereogenic center and a planar chirality. Ligand I ((S)-Cp,Cp-IndoNOP) revealed an unprecedented ³¹P NMR fluxional behavior related to a rotation inhibition around the P-heteroatom (N and O) bonds. These new AMPP ligands were used in the enantioselective hydrogenation of various α -functionalized ketones, i.e., dihydro-4,4-dimethyl-2,3-furandione 14, N-benzyl benzoylformamide 15, Et pyruvate 16, and 2-(N,N-dimethyl)aminoacetophenone hydrochloride 17. The stereoelectronic effects generated by the presence of the tricarbonyl chromium moiety onto the hydrogenations have been assessed. The beneficial effect of the matching chiralities in ligand associated with the use of the most appropriate nonchiral ligand Cl has resulted in a win of 13% of ee for the rhodium-based hydrogenation of 15. While using the most suitable new chiral AMPP ligand from this study, the four above-mentioned substrates were converted into the corresponding optically active alcs. in >99% ee (14/I), >99% ee (15/I), 87% ee (16/I), and >99% ee (17/I), resp.
IT 216592-61-9P 216592-67-5P 321744-12-1P
 RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
 USES (Uses)
 (preparation of free and chromium-complexed aminophosphine phosphinite ligands for highly enantioselective hydrogenation of

alpha-functionalized ketones)

RN 216592-61-9 CAPLUS

CN Phosphinous acid, diphenyl-, [(2S)-1-(diphenylphosphino)-2-azetidinyl]methyl ester (9CI) (CA INDEX NAME)

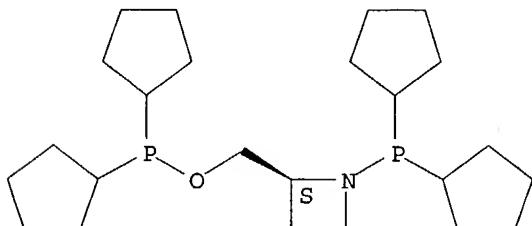
Absolute stereochemistry.



RN 216592-67-5 CAPLUS

CN Phosphinous acid, dicyclopentyl-, [(2S)-1-(dicyclopentylphosphino)-2-azetidinyl]methyl ester (9CI) (CA INDEX NAME)

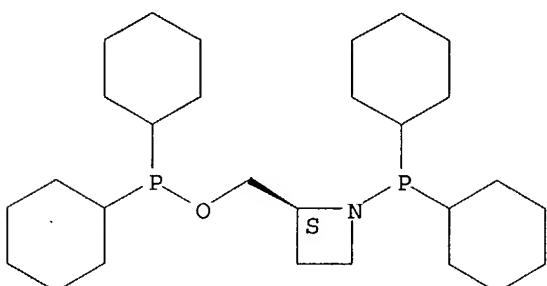
Absolute stereochemistry.



RN 321744-12-1 CAPLUS

CN Phosphinous acid, dicyclohexyl-, [(2S)-1-(dicyclohexylphosphino)-2-azetidinyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

84

THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

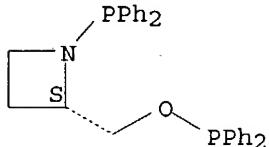
ACCESSION NUMBER: 1998:682695 CAPLUS

DOCUMENT NUMBER: 130:38471

TITLE: Enantioselective hydrogenation of functionalized ketones. Synthesis and application of new chiral aminophosphine-phosphinite ligands

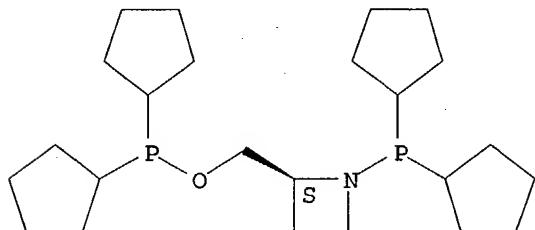
AUTHOR(S) : Pasquier, Corinne; Eilers, Juergen; Reiners, Iris;
 Martens, Juergen; Mortreux, Andre; Agbossou, Francine
 CORPORATE SOURCE: Laboratoire Catalyse Heterogene Homogene, Groupe
 Chimie Organique Appliquee ENSC Lille, Universite
 Sciences Technologies Lille, Villeneuve d'Ascq,
 F-59652, Fr.
 SOURCE: Synlett (1998), (10), 1162-1164
 CODEN: SYNLES; ISSN: 0936-5214
 PUBLISHER: Georg Thieme Verlag
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S) : CASREACT 130:38471
 AB Chiral aminophosphine-phosphinites were synthesized and applied
 successfully in the enantioselective hydrogenation of dihydro-4,4-dimethyl-
 2,3-furandione, PhCOCONHCH₂Ph, and Et pyruvate providing the corresponding
 hydroxy products in ≤ 97, 95, and 80% ee, resp.
 IT 216592-61-9P 216592-67-5P
 RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
 USES (Uses)
 (preparation of chiral aminophosphine-phosphinite ligands and application in
 asym. hydrogenation of ketones)
 RN 216592-61-9 CAPLUS
 CN Phosphinous acid, diphenyl-, [(2S)-1-(diphenylphosphino)-2-
 azetidinyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 216592-67-5 CAPLUS
 CN Phosphinous acid, dicyclopentyl-, [(2S)-1-(dicyclopentylphosphino)-2-
 azetidinyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT